

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054899 A1

(51) International Patent Classification⁷: **G01T 1/202**

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(21) International Application Number:

PCT/EP2004/009379

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(22) International Filing Date: 21 August 2004 (21.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

03027698.4 4 December 2003 (04.12.2003) EP

03027697.6 4 December 2003 (04.12.2003) EP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

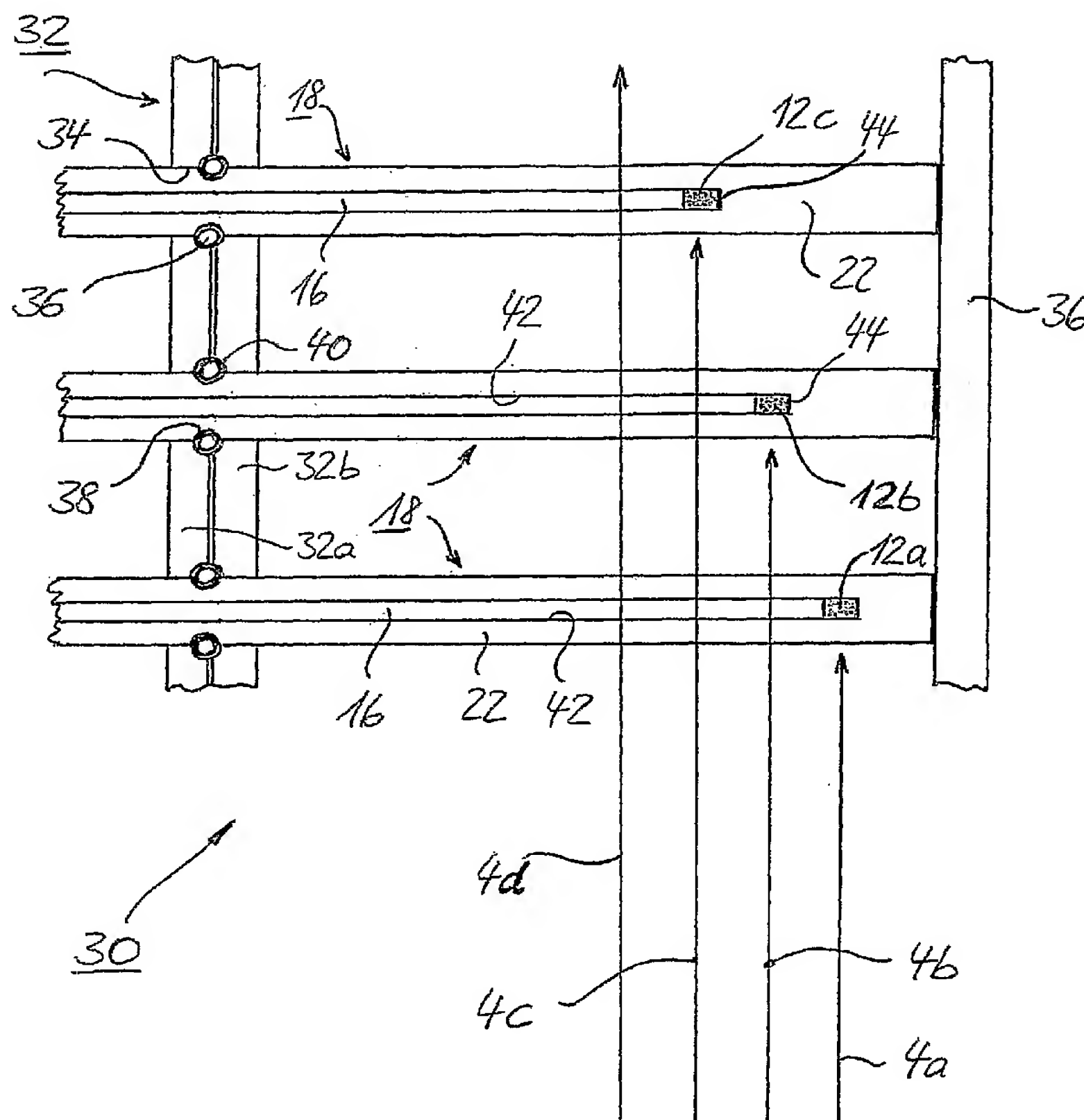
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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: AN INORGANIC SCINTILLATING MIXTURE AND A SENSOR ASSEMBLY FOR CHARGED PARTICLE DOSIMETRY



(57) Abstract: The invention discloses an inorganic scintillating mixture comprising at least a first and a second component each having a characteristic behaviour in response to the irradiation with charged particles, such as protons and heavy ions, showing a typical Bragg peak with respect to a relative depth dose; said first component having a quenching characteristic in the bragg peak region and said second component showing an increased efficiency in the bragg peak region both related to a reference curve for the relative dose. The invention discloses also a sensor assembly (30) for charged particle dosimetry, comprising : a three-dimensional array of sensor heads (12); each sensor head (12) being located on one end of an optical fibre (16), which is associated with an optical light intensity measuring assembly (20). The head (12) and its optical fibre (16) are inserted into a respective cavity (42) located in a holder member (22).



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

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